

The Kroger Co.(KR)

\$37.91 (As of 04/21/21)

Price Target (6-12 Months): **\$40.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 11/25/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:A

Value: A

Growth: C

Momentum: B

Summary

Shares of Kroger have risen and outpaced the industry in the past three months. The company has been making every effort to strengthen position not only with respect to products but also in terms of the way consumers prefer shopping. The company's "Restock Kroger" program involving investments in omni-channel platform, identifying margin-rich alternative profit streams, merchandise optimization, and lowering of expenses has been gaining traction. These aided the company to post decent fourth-quarter fiscal 2020 results, wherein both the top and the bottom lines grew year-over-year. However, Kroger expects tough year-over-year comparison in fiscal 2021, and signaled a decline in identical sales, without fuel. Pandemic-induced demand is likely to moderate, as vaccination drive gathers pace and consumers return to the old normal.

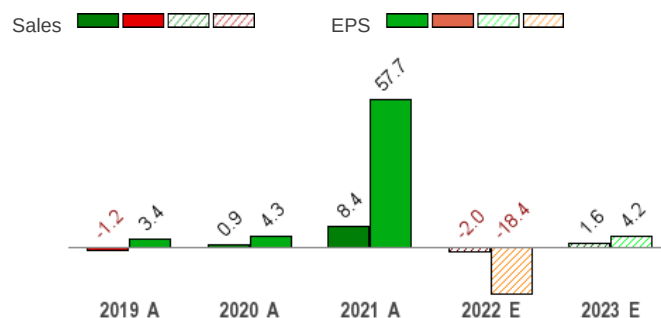
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$42.99 - \$30.35
20-Day Average Volume (Shares)	9,107,446
Market Cap	\$28.4 B
Year-To-Date Price Change	18.9%
Beta	0.37
Dividend / Dividend Yield	\$0.72 / 1.9%
Industry	Retail - Supermarkets
Zacks Industry Rank	Bottom 7% (237 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	17.4%
Last Sales Surprise	-0.9%
EPS F1 Estimate 4-Week Change	0.4%
Expected Report Date	06/17/2021
Earnings ESP	15.8%
P/E TTM	10.9
P/E F1	13.4
PEG F1	2.1
P/S TTM	0.2

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2023					131,840 E
2022	39,222 E	29,792 E	29,633 E	30,780 E	129,792 E
2021	41,549 A	30,489 A	29,723 A	30,737 A	132,498 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2023	\$1.14 E	\$0.58 E	\$0.59 E	\$0.75 E	\$2.95 E
2022	\$0.99 E	\$0.53 E	\$0.61 E	\$0.70 E	\$2.83 E
2021	\$1.22 A	\$0.73 A	\$0.71 A	\$0.81 A	\$3.47 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/21/2021. The report's text and the analyst-provided price target are as of 04/22/2021.

Overview

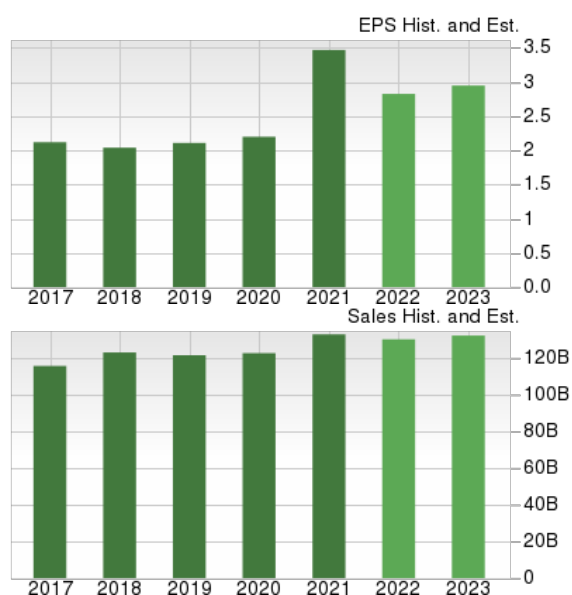
The Kroger Co. (KR), which operates in the thin-margin grocery industry, has been undergoing a complete makeover, not only with respect to products but also in terms of the way consumers prefer shopping grocery. The company is launching plant-based products as well as eyeing technological expansion. It acquired meal kit company Home Chef and partnered with British online grocery delivery firm Ocado that reinforces its position in the online ordering, automated fulfillment and home delivery space. It has also introduced grocery delivery service Kroger Ship and inked a deal with driverless car company Nuro.

This Cincinnati, Ohio-based company operates supermarkets under banners including Kroger, City Market, Dillons, Food 4 Less, Fred Meyer, Fry's, Harris Teeter, Jay C, King Soopers, Mariano's, Pick 'n Save, QFC, Ralphs and Smith's. Further, it also manufactures and processes certain food products that are sold in its supermarkets.

Kroger's supermarket and multi-department stores operate under four formats combo stores (combination of food and drug stores), multi-department stores, marketplace stores, and price impact warehouses. The combo stores include natural food and organic sections, pharmacies, general merchandise, and pet centers, as well as offer perishables items such as fresh seafood and organic produce.

The multi-department stores offer a collection of general merchandise products such as apparel, home fashion and furnishings, electronics, automotive products, toys, and fine jewelry. The marketplace stores include full-service grocery and pharmacy departments and a general merchandise area that includes outdoor living products, electronics, home goods, and toys.

The combo stores, multi department stores, and marketplace stores also have fuel centers. The price impact warehouse offers grocery, health, and beauty care items.



Reasons To Buy:

▲ **Impressive Q4 Performance:** Kroger came up with fourth-quarter fiscal 2020 results, wherein both the top and the bottom lines improved from the prior-year period. Notably, this was the fifth straight quarter of earnings beat. The company has prioritized its actions to resonate well with the prevailing crisis and burgeoning demand for fresh, convenient food and meal solutions. We note that the company's digital business remains a key growth driver. Evidently, customers are opting e-commerce solutions for their grocery and other household essentials. Considering the current scenario, the company has been focusing on no-contact delivery option, low-contact pickup service and ship-to-home orders. It also continued to expand contactless payment solutions like Kroger Pay. Kroger has been making prudent investments to bolster omni-channel operations and improve supply chain amid such challenging times. Shares of Kroger have risen 97.4% in the past three months compared with the industry's decline of 2.8%.

A dominant position among the nation's largest grocery retailers enables Kroger to boost its market share by expanding store base, introducing new items and digital coupons.

▲ **Strategic Endeavors:** A dominant position among the nation's largest grocery retailers enables Kroger to boost market share with expansion of plant-based products, digital coupons, order online pick up in store and smart shopping lists. The company's Customer 1st strategy enriches the consumers shopping experience and convinces them of returning to the store. Notably, the company has been expanding contact-free payment solutions like Scan, Bag and Go and Kroger Pay. Additionally, Kroger is launching a highly-advanced Customer Fulfillment Center (CFC) in Monroe, OH. The company's new first-of-its-kind CFC in the United States is powered by Ocado's leading e-commerce technology. The facility combines vertical integration, machine learning as well as robotics with efficient and affordable delivery services. Undoubtedly, the company is doing everything to meet the rising demand for Pickup orders that help in minimizing person-to-person interaction. The company started accepting Supplemental Nutrition Assistance Program (SNAP) benefits for pickup orders. We note that digital sales surged 118% during the fourth quarter of fiscal 2020, with pickup or delivery reaching more than 98% of Kroger households (2,223 Pickup locations and 2,472 Delivery locations). Impressively, Our Brands exceeded \$26.2 billion in sales in fiscal 2020. Moreover, Simple Truth exceeded \$3 billion in annual sales and launched 53 new items in the Plant Based collection. Management anticipates two-year identical sales stack in the band of 9.1-11.1%. Additionally, the company expects adjusted net earnings per share and adjusted FIFO operating profit to have compounded annual growth rates of 12-16% and 5.4-8.5%, respectively. Over the two years, this would culminate into total shareholder return above the prior target of 8-11%.

▲ **Major Buyouts & Partnership:** Management continues to deploy capital to concentrate more on remodels, merchandising, and other viable projects to overcome competition in the grocery space. The industry has been undergoing a fundamental change with technology playing a key role as focus shifts to online shopping. In this regard, Kroger's buyout of meal kit provider, Home Chef, is noteworthy. The company also expanded its Home Chef Express meal kits nationwide. Home Chef has collaborated with Impossible Foods. With this collaboration, Home Chef becomes the first meal kit-delivery company that offers Impossible Burger. This apart, the company has partnered with British online grocery delivery company Ocado that reinforces its position in the online ordering, automated fulfillment and home delivery space. Kroger is aggressively working toward more convenient grocery delivery options. In this regard, the company has started using Nuro's fully autonomous, driverless vehicles for grocery delivery services. In order to further strengthen its digital operations, Kroger joined forces with Alibaba to launch "Our Brands" through the latter's Tmall platform. Also, Kroger in association with ClusterTruck announced the launch of two on-premise kitchens at stores in Metro Indianapolis, IN and Metro Columbus, OH. Kroger's delivery services wing — Kroger Ship — partnered with Mirakl, a leading software platform enabling B2C and B2B digital marketplaces. Mirakl's best-in-class marketplace solution and marketplace offering of third-party sellers are likely to add steam to Kroger's ship-to-home assortment. Kroger has expanded its partnership with 80 Acres Farms, whereby the latter will serve 316 Kroger locations across Ohio, Indiana and Kentucky.

▲ **"Restock Kroger" Program:** The company's "Restock Kroger" program involving investments in omni-channel platform, identifying margin-rich alternative profit streams, merchandise optimization, and lowering of expenses has been gaining traction. Management is targeting margin-rich alternative profit streams such as Kroger Personal Finance, Media, and Customer Data Insights. Under the program, the company is also passing the benefit of cost containment to customers by lowering prices. The company attained more than \$1 billion of cost savings for the third straight year in fiscal 2020. Alternative profit continues to be a major catalyst contributing \$150 million of incremental operating profit in fiscal 2020, on top of the \$100 million in fiscal 2019. As a part of the program, the company is making investments in space optimization, store remodels and technology advancements. The company is making an incremental investment in associates — wages, training and development, customers and infrastructure.

Reasons To Sell:

- ▼ **Pandemic-Led Demand Likely to Moderate:** While Kroger witnessed increased sales in all the four quarters of fiscal 2020, the trend is likely to moderate in the near term. Notably, the company has been benefitting from higher demand (especially online) due to the pandemic-induced stock hoarding and elevated at-home consumption. However, with the vaccination drive gathering pace, consumers are likely to return to the old normal, such as dining out, traveling and other customary practices. This in turn will result in lower at-home consumption activities and a drop in pantry loading. Quite apparent, Kroger may face tough year-over-year comparisons in sales, as COVID-19 benefits are lapped. Notably, management issued fiscal 2021 guidance, and signaled a decline in identical sales, without fuel. The company expects identical sales, without fuel, to be down 3-5% in fiscal 2021. Markedly, identical sales without fuel grew 14.1% in fiscal 2020. The company anticipates FIFO operating profit in the band \$3.3-\$3.5 billion. The company reported operating profit of \$2.8 billion and adjusted FIFO operating profit of \$4.1 billion in fiscal 2020. Management now anticipates fiscal 2021 earnings between \$2.75 and \$2.95 per share. We note that the company reported adjusted earnings of \$3.47 per share in fiscal 2020.
- ▼ **Deleverage in OG&A Expenses a Concern:** Any deleverage in operating, general and administrative expenses may hurt margins. During the fourth quarter of fiscal 2020, operating, general and administrative expenses rose 27.1% to \$6,338 million. This followed an increase of 1.9% in the preceding quarter. As a percentage of sales, the same increased 330 basis points to 20.6%. Again, costs related to additional employee payments and benefits, along with investments undertaken to preserve safety and health of customers and team members amid the pandemic may weigh on margins. During the fourth quarter, the incremental COVID-related investments were approximately \$275 million. The company invested about \$300 million in increased hourly wage in fiscal 2020. This was part of the \$800 million incremental investment in associate wages earlier announced under the Restock Kroger. As a result of this continuing investment, the company has increased its average hourly rate to over \$20 per hour. In fiscal 2021, the company expects to invest an incremental \$350 million in continued average hourly wage increases. Management stated that the healthcare and pension costs, which most of our competitors do not face, hurt the company's financial results.
- ▼ **Debt Analysis:** Kroger ended fourth-quarter fiscal 2020 with long-term debt (including obligations under finance leases) of \$12,502 million as of Jan 30, 2020, which showcased an increase from \$11,925 million at the end of the preceding quarter. Moreover, its debt-to-capitalization ratio is high when compared with its industry. The company's debt-to-capitalization ratio was 0.58 at the end of the quarter compared with that of the industry's 0.37. Also, its times interest earned ratio of 7.2 was below 7.7 in the third quarter and that of the industry's 11.7.
- ▼ **Stiff Competition & Promotional Activities:** Stiff competition, volatility in food prices and an aggressive promotional environment are the primary headwinds with which Kroger is encountering. The grocery business is highly competitive and fragmented, and Kroger faces intense competition from big players such as Amazon, Walmart and Safeway, other conventional retailers and specialty gourmet retailers with respect to price, store expansion and promotional activities. This may dent the company's sales and margins.

The grocery business is highly competitive and fragmented, and Kroger faces stiff competition from big players. Also, any volatility in fuel prices and heightened promotional environment may make things tough.

Last Earnings Report

Kroger's Q4 Earnings Top Estimates, Digital Sales Spike

The Kroger Co. came up with fourth-quarter fiscal 2020 results, wherein both the top and the bottom lines improved from the prior-year period. Notably, this was the fifth straight quarter of earnings beat. This Cincinnati, OH-based company has prioritized its actions to resonate well with the prevailing crisis and burgeoning demand for fresh, convenient food and meal solutions. We note that the company's digital business remains a key growth driver.

Chairman and CEO Rodney McMullen said, "We finished fiscal year 2020 with strong sales and earnings, as heightened demand for fresh, convenient food and meal solutions across modalities, including in store, pick up and home delivery, continued throughout the fourth quarter."

Quarter Ending 01/2021

Report Date	Mar 04, 2021
Sales Surprise	-0.89%
EPS Surprise	17.39%
Quarterly EPS	0.81
Annual EPS (TTM)	3.47

Let's Introspect

Kroger posted adjusted earnings of 81 cents a share that surpassed the Zacks Consensus Estimate of 69 cents and increased sharply from 57 cents reported in the prior-year quarter.

Total sales of \$30,737 million fell short of the Zacks Consensus Estimate of \$31,012 million. Nonetheless, the metric increased 6.4% year over year. Excluding fuel and dispositions, sales improved 10.7% from the year-ago period. The company's digital sales surged 118%, while identical sales, without fuel, grew 10.6% driven by continued strength in grocery, produce and meat. Digital contributed approximately 5.5% to total identical sales without fuel.

We note that gross margin expanded 80 basis points to 22.9%. FIFO gross margin, excluding fuel, declined 6 basis points from the year-ago period. This reflects continued price investments, offset by sourcing efficiencies and growth in alternative profit streams. Adjusted FIFO operating profit came in at \$837 million, up from \$758 million reported in the prior-year quarter.

Other Financial Aspects

Kroger ended the quarter with cash of \$371 million, total debt of \$13,413 million, and shareowners' equity of \$9,550 million. Net total debt decreased by \$1,973 million over the last four quarters. The company's net total debt to adjusted EBITDA ratio is now 1.75 compared to target range of 2.3 to 2.5. During fiscal 2020, the company returned \$1.9 billion to shareholders. The company repurchased \$1.32 billion of shares in the fiscal year.

2021 View

Notably, Kroger issued fiscal 2021 guidance, and signaled a decline in identical sales, without fuel. Analysts expect pandemic-induced demand to moderate, as vaccination drive gathers pace and consumers return to the old normal. The company expects identical sales, without fuel, to be down 3-5% in fiscal 2021. Markedly, identical sales without fuel grew 14.1% in fiscal 2020.

The company anticipates FIFO operating profit in the band \$3.3-\$3.5 billion. The company reported operating profit of \$2.8 billion and adjusted FIFO operating profit of \$4.1 billion in fiscal 2020.

Management now anticipates fiscal 2021 earnings between \$2.75 and \$2.95 per share. We note that the company reported adjusted earnings of \$3.47 per share in fiscal 2020.

Management now envisions capital expenditures in the band of \$3.4-\$3.6 billion and expects to generate free cash flow between \$1.6 billion and \$1.8 billion in fiscal 2021.

Recent News

Kroger Launches New Highly Automated Fulfillment Center – Apr 14, 2021

Kroger is launching a highly-advanced Customer Fulfillment Center (CFC) in Monroe, OH. The company's new first-of-its-kind CFC in the United States is powered by Ocado's leading e-commerce technology. The facility combines vertical integration, machine learning as well as robotics with efficient and affordable delivery services.

Kroger On Track to Boost Digital Business, Reinstates View – Mar 31, 2021

In a virtual investor day event, held on Mar 31, Kroger provided updates regarding its strategic initiatives to further strengthen digital business and plans to boost shareholders' return. According to sources, the company plans to double digital sales by the end of 2023. It plans to direct its strategic endeavors and transformation efforts such as Restock Kroger, Leading With Fresh and Accelerating With Digital programs toward boosting omni-channel capabilities. It also plans to boost e-commerce by expanding assortments, especially by adding more fresh items. Moreover, the company plans to fulfill online orders with greater efficiency through expanded automation across facilities. Apart from these, the company plans to boost ad revenues from its online business channel.

Additionally, the company expects to deliver total shareholder returns in the bracket of 8-11%, through earnings growth of 3-5% as well as strong cash position. Moreover, the company reiterated its guidance for fiscal 2021. The view includes continued expectations of a decline in identical sales this year. Coming to the company's outlook for fiscal 2021, it continues to expect identical sales, without fuel, to drop 3-5%. Markedly, identical sales without fuel grew 14.1% in fiscal 2020. On a two-year basis, identical sales are expected to rise in the band of 9.1-11.1%. Also, the company anticipates FIFO operating profit in the band of \$3.3-\$3.5 billion. The company reported adjusted FIFO operating profit of \$4.1 billion in fiscal 2020. On a two-year CAGR basis, the metric is expected to rise 5.4-8.5%. Further, the company continues to expect adjusted earnings for fiscal 2021 in the range of \$2.75-\$2.95. We note that the company reported adjusted earnings of \$3.47 per share in fiscal 2020. On a two-year CAGR basis, earnings are expected to grow 12-16%. As projected earlier, management envisions capital expenditures in the band of \$3.4-\$3.6 billion and expects to generate free cash flow between \$1.6 billion and \$1.8 billion in fiscal 2021.

Kroger Declares Dividend – Mar 12, 2021

Kroger declares quarterly dividend of 18 cents a share which is payable on Jun 1, 2021, to shareholders in record as on May 14, 2021.

Kroger Expands Partnership with 80 Acres Farms – Mar 9, 2021

Kroger expanded its partnership with 80 Acres Farms to reach more consumers in the Midwest – both in store and online. Beginning Mar 15, 80 Acres will serve 316 Kroger locations across Ohio, Indiana and Kentucky.

Valuation

Kroger shares are up 19.3% in the year-to-date period and nearly 15.3% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 1.1% while the Zacks Retail-Wholesale sector inched-up 0.1%, in the year-to-date period. Over the past year, the Zacks sub-industry and the sector are up 10.2% and 35.3%, respectively.

The S&P 500 index is up 11.9% in the year-to-date period and 52% in the past year.

The stock is currently trading at 13.28X forward 12-month earnings, which compares to 23.46X for the Zacks sub-industry, 32.09X for the Zacks sector and 23.02X for the S&P 500 index.

Over the past five years, the stock has traded as high as 16.31X and as low as 9.24X, with a 5-year median of 12.68X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$40 price target reflects 14.01X forward 12-month earnings.

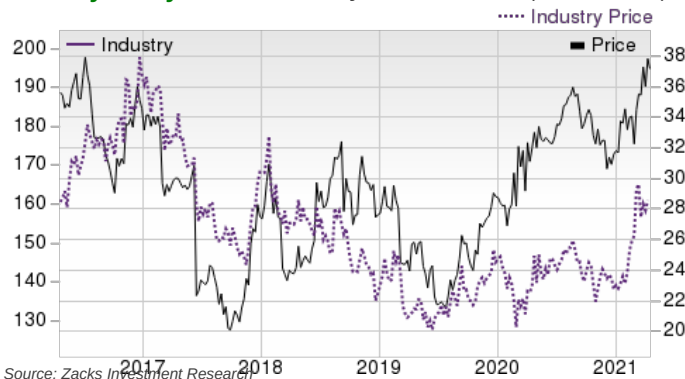
The table below shows summary valuation data for KR

Valuation Multiples - KR					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	13.28	23.46	32.09	23.02
	5-Year High	16.31	24.32	34.1	23.83
	5-Year Low	9.24	15.4	19.13	15.3
	5-Year Median	12.68	19.24	23.81	18.01
P/S F12M	Current	0.22	0.52	1.4	4.81
	5-Year High	0.3	0.52	1.4	4.81
	5-Year Low	0.13	0.35	0.84	3.21
	5-Year Median	0.19	0.42	1.02	3.71
EV/EBITDA TTM	Current	6.26	12.57	19.67	23.02
	5-Year High	10.87	12.57	20.84	23.08
	5-Year Low	4.91	6.35	11.19	11.5
	5-Year Median	6.75	7.48	13.33	15.65

As of 04/21/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 7% (237 out of 254)



Top Peers

Company (Ticker)	Rec	Rank
Amazon.com, Inc. (AMZN)	Neutral	3
Companhia Brasileira de Distribuicao (CBD)	Neutral	4
Costco Wholesale Corporation (COST)	Neutral	3
Carrefour SA (CRRFY)	Neutral	3
Dollar Tree, Inc. (DLTR)	Neutral	3
Marks and Spencer Group PLC (MAKSY)	Neutral	4
Target Corporation (TGT)	Neutral	3
Walmart Inc. (WMT)	Neutral	3

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Retail - Supermarkets				Industry Peers		
	KR	X Industry	S&P 500	COST	TGT	WMT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	A	-	-	C	A	A
Market Cap	28.40 B	4.23 B	30.14 B	164.50 B	103.35 B	396.62 B
# of Analysts	9	4	12	11	13	15
Dividend Yield	1.91%	1.56%	1.25%	0.75%	1.31%	1.56%
Value Score	A	-	-	C	B	B
Cash/Price	0.10	0.10	0.06	0.06	0.08	0.04
EV/EBITDA	5.25	5.25	17.29	22.84	11.78	12.49
PEG F1	2.09	2.17	2.38	4.27	2.35	4.72
P/B	3.01	1.34	4.06	10.20	7.19	4.55
P/CF	4.72	5.97	17.06	29.63	14.29	14.94
P/E F1	13.30	13.36	22.05	37.46	23.94	25.97
P/S TTM	0.21	0.27	3.46	0.92	1.10	0.71
Earnings Yield	7.49%	7.49%	4.40%	2.67%	4.18%	3.85%
Debt/Equity	1.31	0.41	0.66	0.47	0.80	0.51
Cash Flow (\$/share)	8.03	3.88	6.78	12.62	14.47	9.45
Growth Score	C	-	-	B	A	A
Historical EPS Growth (3-5 Years)	8.37%	5.95%	9.39%	14.68%	11.26%	4.52%
Projected EPS Growth (F1/F0)	-18.54%	16.34%	15.97%	12.12%	-8.10%	-1.07%
Current Cash Flow Growth	20.45%	15.81%	0.72%	8.77%	22.82%	6.44%
Historical Cash Flow Growth (3-5 Years)	8.17%	3.85%	7.37%	10.07%	6.93%	2.01%
Current Ratio	0.81	0.94	1.39	0.99	1.03	0.97
Debt/Capital	56.69%	28.93%	41.19%	31.80%	44.41%	33.97%
Net Margin	1.95%	2.19%	10.60%	2.43%	4.67%	2.42%
Return on Equity	28.31%	16.98%	15.09%	24.94%	36.95%	18.85%
Sales/Assets	2.77	2.32	0.51	3.21	1.92	2.30
Projected Sales Growth (F1/F0)	-2.04%	0.00%	7.53%	12.90%	-1.53%	-2.59%
Momentum Score	B	-	-	D	A	C
Daily Price Change	0.40%	0.32%	1.24%	0.63%	-0.24%	0.29%
1-Week Price Change	-1.77%	0.85%	1.43%	2.07%	1.55%	0.59%
4-Week Price Change	6.16%	6.16%	7.02%	10.66%	9.82%	6.08%
12-Week Price Change	-2.17%	6.57%	15.76%	4.97%	15.98%	-1.84%
52-Week Price Change	17.33%	17.33%	58.99%	20.90%	93.53%	7.30%
20-Day Average Volume (Shares)	9,107,446	79,495	1,778,154	2,299,923	2,907,739	7,817,392
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.59%	0.00%
EPS F1 Estimate 4-Week Change	0.41%	0.00%	0.07%	0.34%	0.82%	0.01%
EPS F1 Estimate 12-Week Change	4.73%	-3.13%	1.97%	-0.24%	-0.46%	-6.40%
EPS Q1 Estimate Monthly Change	4.69%	0.03%	0.00%	0.98%	1.18%	0.07%

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	A
Growth Score	C
Momentum Score	B
VGM Score	A

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.

Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.